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1	BRS	L1	1	10/730,644	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	2006/06/25 10:58
2	BRS	L2	1	1 and (intelligent or caching or working or director\$4 or auxiliary)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	2006/06/25 11:38
3	BRS	L3	1	1 and exit\$4	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	2006/06/25 11:39
4	BRS	L4	1	1 and shut	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	2006/06/25 12:22

	Type	L #	Hits	Search Text	DBs	Time Stamp
5	BRS	L5	0	((disk or disc) same (tempor\$4 or auxiliary or cach\$4) same (power\$4 or stand adj2 by) same (program\$4 or instruction or code)).ti.	US-PGPUB ; USPAT; EPO; JPO; IBM_TDB	2006/06/25 12:29
6	BRS	L6	16	((disk or disc) same (tempor\$4 or auxiliary or cach\$4) same (power\$4 or stand adj2 by) same (program\$4 or instruction or code)).clm.	US-PGPUB ; USPAT; EPO; JPO; IBM_TDB	2006/06/25 12:49
7	BRS	L7	10798	(711/111 or 711/112 or 711/113 or 711/141 or 711/161 or 711/162 or 713/320)/ccls.	US-PGPUB ; USPAT; EPO; JPO; IBM_TDB	2006/06/25 12:49
8	BRS	L8	140	((disk or disc) same (tempor\$4 or auxiliary or cach\$4) same (power\$4 or stand adj2 by) same (program\$4 or instruction or code)) and 7	US-PGPUB ; USPAT; EPO; JPO; IBM_TDB	2006/06/25 12:50

	Type	L #	Hits	Search Text	DBs	Time Stamp
9	BRS	L9	41	((disk or disc) with (tempor\$4 or auxiliary or cach\$4) same (power\$4 or stand adj2 by) with (program\$4 or instruction or code)) and 7	US-PGPUB ; USPAT; EPO; JPO; IBM_TDB	2006/06/25 12:50
10	BRS	L10	0	((disk or disc) with (tempor\$4 or auxiliary or cach\$4) same (power\$4 or stand adj2 by) with (program\$4 or instruction or code)).ti. and 7	US-PGPUB ; USPAT; EPO; JPO; IBM_TDB	2006/06/25 12:51
11	BRS	L11	0	("2005/0125607").URPN.	USPAT	2006/06/25 12:51



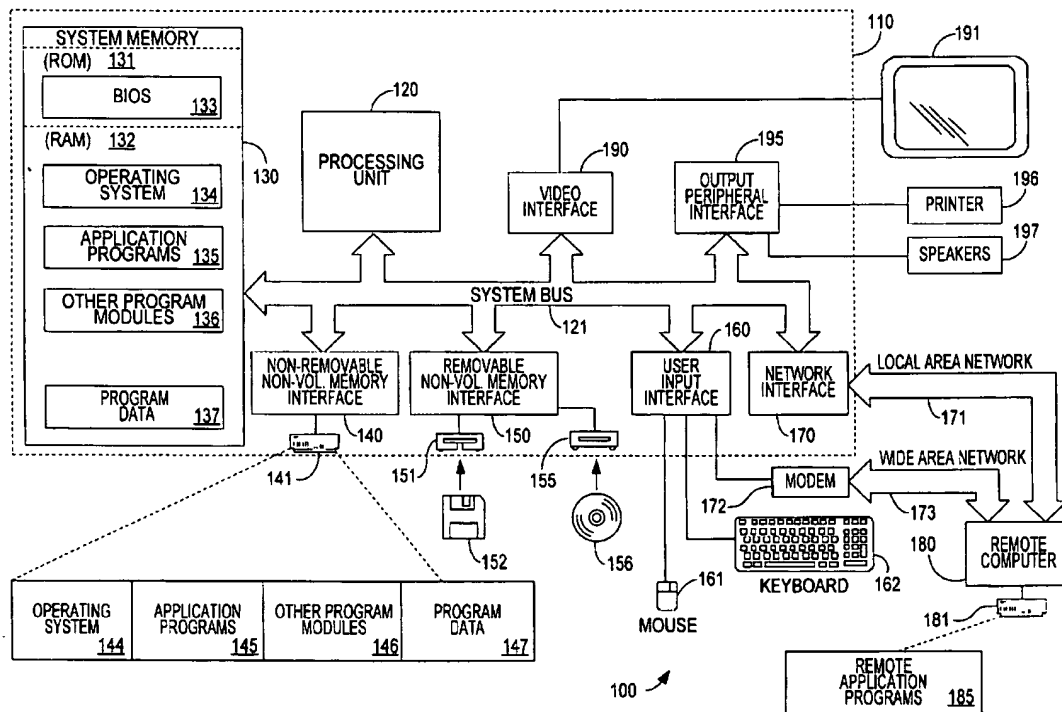
US 20040003223A1

(19) **United States**(12) **Patent Application Publication**  
Fortin et al.(10) Pub. No.: **US 2004/0003223 A1**(43) Pub. Date: **Jan. 1, 2004**(54) **APPARATUS AND METHOD TO DECREASE  
BOOT TIME AND HIBERNATE AWAKEN  
TIME OF A COMPUTER SYSTEM**

(52) U.S. Cl. .... 713/1

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**CHICAGO, IL 60601-6780 (US)**(73) Assignee: **Microsoft Corporation**, Redmond, WA(21) Appl. No.: **10/186,164**(22) Filed: **Jun. 27, 2002****Publication Classification**(51) Int. Cl.<sup>7</sup> ..... **G06F 15/177**(57) **ABSTRACT**

A method and apparatus to decrease the boot time and the hibernate awaken time of a computer system is presented. Static and dynamic configuration data is stored in flash memory. The size of flash memory is selected so that the initialization time of the configuration data stored in the flash memory is approximately equal to the spin-up time of the disk drive where the operating system is stored. During power down or entry into a hibernate mode, the computer system determines the static and dynamic configuration data to be stored in flash memory based on a history of prior uses. Data is also stored in the flash memory during system operation to reduce the number of times the disk drive is spun up. When the computer system is powered up or awakened from hibernation, the configuration data in flash memory is initialized while the disk drive is spinning up.



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**TITLE: Apparatus and method to decrease boot time and  
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**PUBLICATION-DATE: January 1, 2004**

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**APPL-NO: 10/186164**

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**----- KWIC -----**

**Claims Text - CLTX (24):**

**23. The computer readable medium of claim 18 having further computer executable instructions for performing the steps of: buffering temporary files in the flash memory while the computer system is operating; and transferring the temporary files to the disk drive when one of powering down the computer system, hibernating the computer system, and detecting that available flash memory is below a threshold level.**